

Remarks

1. Summary of the Office Action

In the office action mailed March 4, 2008, the Examiner rejected 1-3, 5-7, 12, and 14 under 35 U.S.C. § 103(a) as being allegedly obvious over U.S. Patent Application Pub. No. 2004/0228292 (Edwards) in view of U.S. Patent No. 6,501,740 (Sun) in view of U.S. Patent No. 5,841,763 (Leondires), and the Examiner rejected claims 8-11 and 13 under 35 U.S.C. § 103(a) as being allegedly obvious over Edwards in view of Sun in view of Leondires in view of U.S. Patent Application Pub. No. 2004/0190489 (Palaez).

2. Status of the Claims

Pending are claims 1-3 and 5-14, of which claim 1 is independent.

3. Response to Rejections

Of the pending claims, claim 1 is independent and stands rejected as being allegedly obvious over Edwards in view of Sun in view of Leondires.

Claim 1 recites that each user station is (i) a half-duplex capable station or (ii) a half-duplex and full-duplex capable station, and that, during a real-time media session between a plurality of user stations via a communication server, the communication server detects that a half-duplex capable station joins the session and that the communication server responsively directs each other participating station to operate in the half-duplex mode.

This functionality is not disclosed or suggested by Edwards, Sun, and Leondires, and the functionality does not logically follow from the limited teachings of Edwards, Sun, and Leondires. Thus, *prima facie* obviousness of the claimed invention over Edwards in view of Sun in view of Leondires does not exist.

In rejecting claim 1, the Examiner admitted that Edwards does not specifically disclose the limitation of during the real-time media session, the communication server detecting that a half-duplex station joins the session and responsively directing each other participating station to operate in the half-duplex mode. The Examiner then proceeded to identify certain concepts disclosed by Edwards and Sun, but those concepts clearly would not reasonably lead one of ordinary skill in the art to achieve the invention recited by claim 1 (now claim 1).

First, the Examiner pointed out that Edwards discloses that users of mobile stations may operate in a full-duplex mode or half-duplex mode. Edwards' disclosure that users may operate in full-duplex or half-duplex mode clearly does not lead to the invention of claim 1. The ability of a user to operate in full-duplex or half-duplex would not logically lead one to achieve the claimed functionality of the communication server detecting that a half-duplex station joins the session and responsively directing each other participating station to operate in the half-duplex mode. Indeed, Edwards accommodates concurrent use of both half-duplex and full-duplex communication. (*See, e.g.*, Edwards at 0013.)

Second, the Examiner pointed out that Edwards discloses that users of mobile stations may terminate the communication if a device leaves the coverage area of the communication system. This teaching also does not logically lead to the functionality of claim 1. The fact that a user can lose coverage and drop out of a communication session clearly does not suggest or reasonably lead to a communication server detecting that a half-duplex station joins the session and responsively directing each other participating station to operate in the half-duplex mode.

Third, the Examiner pointed out that Sun discloses the concept of a user joining an existing conference by pressing a join button. Clearly, the mere concept of a user being able to join an existing conference does not reasonably or logically lead to the claim function of a

communication server detecting that a half-duplex station joins the session and responsively directing each other participating station to operate in the half-duplex mode.

Fourth, the Examiner pointed out that Sun also discloses the concept of conferences being operable in either a full duplex mode or a half duplex mode. But again, the mere ability to conduct a conference in one of these modes does not reasonably or logically lead to the claim function of a communication server detecting that a half-duplex station joins the session and responsively directing each other participating station to operate in the half-duplex mode.

After noting these teachings of Edwards and Sun, the Examiner asserted that it would have been obvious to incorporate Sun's teaching into Edward's teaching:

It would have thus been obvious to a person skilled in the art at the time the invention was made to incorporate the concept of having the capability of joining an existing conference as disclosed by Sun into the method for providing full duplex and half duplex dispatch calls, in order to efficiently ensure that users of mobile devices are capable of joining conference calls that are held in half duplex or full duplex modes.

(See Office Action at page 4.) This assertion by the Examiner, however, does not support a conclusion that claim 1 is obvious under 35 U.S.C. § 103.

Next, the Examiner asserted that the combination of Edwards and Sun fails to disclose the specific limitation of responsively directing each other participating station to operate in the half-duplex mode, when a half duplex station joins the session. And the Examiner noted that paragraph 0014 of Edwards teaches that if any half-duplex radios are involved in a session with full-duplex radios, the full-duplex radios must wait for the half-duplex radios to stop transmitting before beginning to speak. The Examiner then asserted that it was well known to direct all radios of a of a system to a half-duplex mode due to individual radio capabilities. In particular, as alleged support for this conclusion, the Examiner asserted:

Leondires discloses that when a conferee joins a conference, if the conferee cannot meet the capabilities established for the conference (such as full duplex conference), the conferee can command the MCU (correlating to a server) to step down the capabilities (step down to half duplex) to allow the conferee to join the conference (col10 lines 34-48).

(See Office Action at page 5.) In turn, the Examiner asserted:

[I]t would have been obvious to a person skilled in the art to incorporate *the concept of stepping down the capabilities of all the radios in a conference* due to one radio with lower capabilities (directing all the radios of a system to half-duplex mode which is a lower capability) as disclosed by Leondires into the method for providing full duplex and half duplex dispatch calls as disclosed by the combination of Edwards and Sun, in order to provide conference service to all radio, no matter it's [sic] capability.

(*Id.*) (Emphasis added) Applicant submits that the Examiner's rationale and reliance on Leondires does not support a conclusion of obviousness.

Leondires teaches that audio-video conferences are set up according to the CODEC capabilities of the conference participants or according to a minimum CODEC capability determined to be in effect for the conference. (*See* Leondires at column 10, lines 38-41.) Leondires then teaches that if a conferee cannot meet the capabilities established for the conference, the conferee operator can command the MCU to step down the capabilities to allow the conferee to join the conference, or the MCU can automatically step down capabilities. (*Id.* at column 10, lines 42-48.)

Contrary to the Examiner's apparent assertion, Leondires does not teach stepping down the capabilities of all the radios in a conference due to one radio having lower capabilities (as emphasized in the quote above). Rather, Leondires teaches stepping down "the capabilities" — which appear to be the capabilities of the conference at the MCU rather than any capabilities of the participating radios.

A reasonable reading of the Leondires reference is that an MCU will support CODECs including, but not limited to, the minimum CODEC capabilities of participating stations. It is of course possible that an MCU can communicate with one session participant according to a CODEC different than the CODEC uses to communicate with another session participant, provided that the MCU can ultimately bridge together the underlying communications. Thus, the vague mention in Leondires of stepping down capabilities could reasonably be understood to mean that the MCU would add support for the lower capability CODEC of the conferee joining the session, while maintaining support for the MCU to communicate with the other conferees according to possibly higher level CODECS. Considering audio and video as a specific example, it would, for instance, be plausible that the MCU could continue supporting video conferencing between those conferees that support audio-video conferencing but exchange only audio with the conferee that supports just audio and not video. A person of ordinary skill in the art reading Leondires, with an understanding of how MCUs operate as a general matter, could very sensibly come to that conclusion. Further, there would be no reason for such a person to read Leondires the way the Examiner has done absent the benefit of reading Applicant's claims.

It follows that Leondires does not teach the MCU detecting that a low capability conferee has joined the session and responsively directing each other participating conferee to operate using the lower capability of that joined conferee. In fact, Leondires does not teach that any of the other participating conferees would even support the CODEC of the joined conferee. But even if the other participating conferees did support the CODEC of the joined conferee, Leondires still does not teach the MCU directing each other participating conferee to operate using the CODEC of the joined conferee. Rather, as discussed above, it is entirely plausible within Leondires that the MCU may step down the capabilities of the conference by beginning to

accept communications according to lower capability CODEC of the joined conferee while still maintaining communications with the other conferees according to a higher capability CODEC.

Furthermore, a person of ordinary skill in the art would have no logical reason to combine the disclosure of Leondires into the teachings of Edwards, because Edwards already achieves the goal of allowing a station to join an ongoing conference. More particularly, as the Examiner noted, Leondires teaches that the MCU can step down capabilities *in order to allow the conferee to join the conference*. (See Leondires at column 10, lines 45-48.) That assumes that, without the MCU stepping down the capabilities, the conferee would not be able to join the conference. Yet Edwards already provides a workable mechanism for allowing a half-duplex radio to remain in a conference when other participating radios switch over to use full-duplex communication: the full duplex radios will simply wait for the half duplex radios to stop talking before the full duplex radios start to speak. (See Edwards at para. 0014). Because Edwards already provides a workable mechanism for conferencing between half-duplex and full-duplex radios, a person of ordinary skill in the art would not have reason to look to Leondires in an effort to allow a half-duplex station to conference with full-duplex stations.

Ultimately, the invention recited by claim 1 does not reasonably follow from the limited teachings of Edwards, Sun, and Leondires. Because the combination of Edwards, Sun, and Leondires does not teach a communication server (e.g., MCU) detecting that a half-duplex capable station joins the session and responsively directing each other participating station to operate in the half-duplex mode, and because a person of ordinary skill in the art would not be compelled to consider the teachings of Leondires since Edwards already provides a way to conference between full-duplex and half-duplex stations, *prima facie* obviousness of claim 1

over the combination of Edwards, Sun, and Leondires does not exist. Therefore, Applicant submits that claim 1 is allowable.

Furthermore, without conceding any of the Examiner's assertions, Applicant submits that dependent claims 2-3 and 5-14 are allowable as well for at least the reason that they depend from allowable claim 1.

4. Conclusion

For the foregoing reasons, Applicant respectfully requests favorable reconsideration and allowance of all of the pending claims.

Should the Examiner wish to discuss this case with the undersigned, the Examiner is invited to call the undersigned at (312) 913-2141.

Respectfully submitted,

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